

ABSTRACT OF THE DISCLOSURE

Differing cytology device apparatuses, and methods for their use, are provided for collecting cytology samples from within a mammalian body. The apparatuses and methods disclosed are minimally invasive. Some of the apparatuses include a needle having an inner lumen extending from a proximal to a distal end. A stylet, having a proximal end and a distal end, is adapted to be inserted into the inner lumen of the needle to plug the inner lumen while a cytology sample is cut in order to prevent contamination within the needle. The distal end of the stylet may be sharp, and may be adapted to extend beyond the distal end of the needle to cut a cytology sample. Also included is a cytology collection device which is adapted to be inserted into the inner lumen of the needle when the stylet is withdrawn from the inner lumen of the needle. The distal end of the cytology collection device is extended beyond the distal end of the needle in order to collect the cytology sample, and then retracted inside the needle after collecting the sample. In one embodiment, a cytology collection device comprises an elongate member having a plurality of bristles near its distal end. In another embodiment, a cytology collection device comprises an inflatable balloon. In yet another embodiment, a cytology collection device comprises a wire mesh device. In a further embodiment, the apparatus may include an endoscope which contains a transducer emitting ultrasound waves which are used to determine a position of the cytology collection device within the body.